

Auditioning for Empathy: Dance, acting, and psychology students' empathic abilities

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Background

Experience in dance has been associated with higher empathic abilities, based on increased engagement in emotional expression¹.

In line with this assumption, actors and psychologists could also be expected to show higher empathic abilities. However, while psychology students' empathic abilities were found to be higher than those of similar professions (e.g., medicine)², the findings of actors' empathic skills are inconclusive³. Moreover, since a variety of empathic ability tests are used⁴, a more systematic approach is needed in order to compare the results from different studies.

We thus aimed to identify changes in different forms of empathy (emotional/cognitive) through discipline specific training by employing a test battery. A better understanding of how empathic abilities can change through training could have a huge impact in easing social tensions in international groups.

For this reason, we traced acting, dance and psychology students' empathic abilities across a set of standard tests as well as a newly designed profession-specific questionnaire. This will allow us to identify which empathic ability tests are sensitive for which group of experts.

Method

Students across the UK and Europe (Belgium, France, Malta, Switzerland, Sweden, The Netherlands) who just started their 1st year in acting, dancing, or psychology were asked to complete an online questionnaire at the beginning of their 1st term. In total, 166 students completed the two empathy measures discussed here (see Fig. 1). The same students currently complete the 2nd version of the online questionnaire.

The online questionnaire consisted of the IRI⁵, RME⁶, EQ⁷, E-Test⁸, a profession-specific IRI, and demographic questions. Students could choose whether they wanted to complete the English (N=102) or French (N=64) version of the questionnaire.

Here, we discuss the results from the 1st measure at the start of their degree course for the subcategories of the Interpersonal Reactivity Index, i.e., Fantasy (IRI-FS), Perspective Taking (IRI-PT), Emotional Concern (IRI-EC) and Personal Distress (IRI-PD) as well as for the Reading the Minds' Eye test (RME). The IRI scores were standardised for statistical comparison.

		English	French
Acting	♀	1	4
	♂	0	4
Dance	♀	54	16
	♂	11	1
Psychology	♀	31	33
	♂	5	6
Total	♀	86	53
	♂	16	11

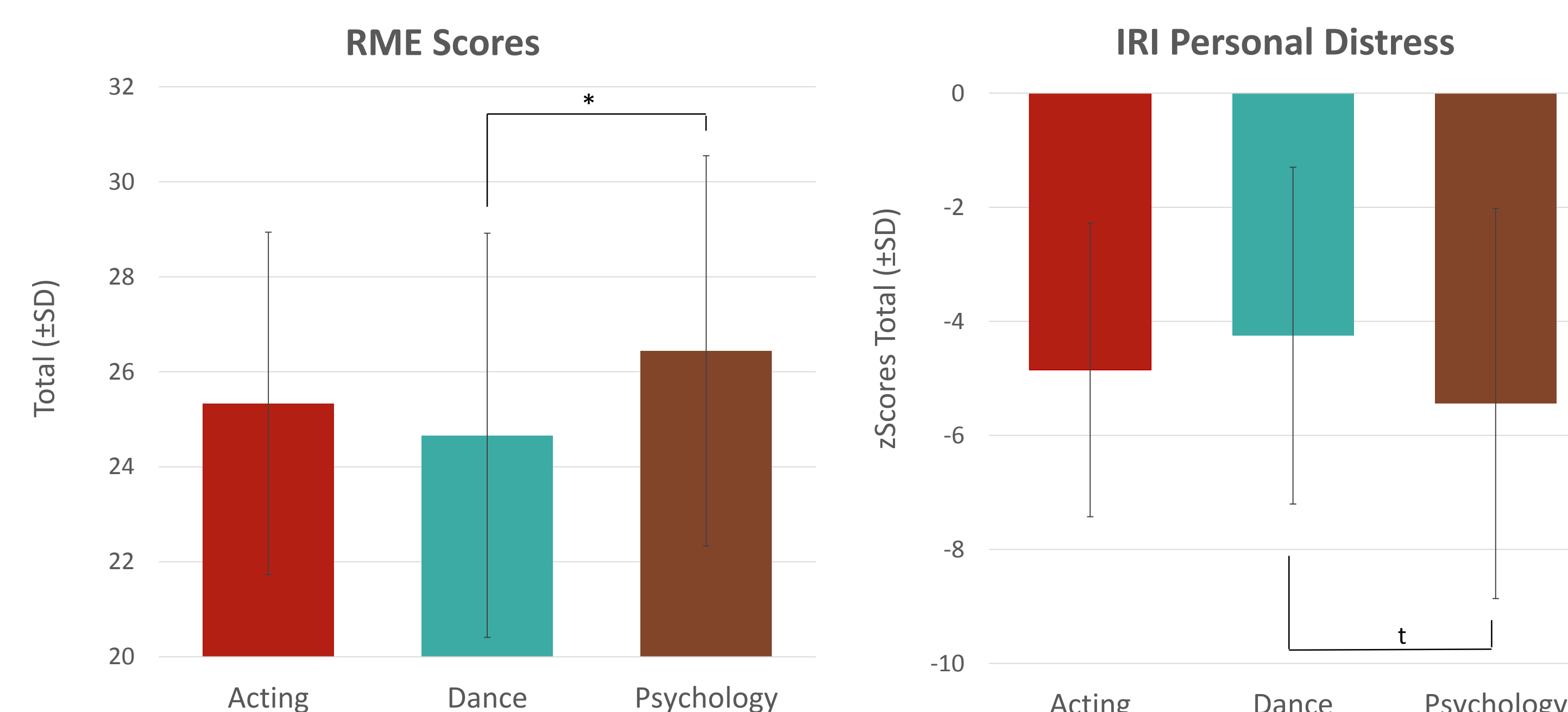
Table 1: Number of participants per questionnaire.

Results I

We ran five ANOVAs with the between subjects factor discipline (acting/dance/psychology) on the dependent variables RME and the four IRI subcategories.

RME scores differed sign. between disciplines, $F(2,163)=3.33$, $p=.038$. Post-hoc t -test showed that scores were sign. higher for psychology than dance students, $p=.033$ _{Bonf.corr.}

None of the IRI subcategories reached sign., however, IRI-PD showed a trend for a sign. main effect, $F(2,163)=2.78$, $p=.065$ (all other p 's $\geq .578$). Post-hoc t -tests showed that this effect is likely due to higher PD in dance compared to psychology students, $p=.059$ _{Bonf.corr.}



The following tests (Results II) control for effects of gender and questionnaire on empathy scores and are based on random samples to adjust for unequal sample size, while maintaining discipline distributions (N=27 for gender and N=64 for languages).



Results II

Females scored sign. higher than males in the RME, $t(52)=2.11$, $p=.039$, $26.11 \pm 3.6 / 23.19 \pm 6.2$. While IRI-EC scores were sign. higher for females than males, $t(52)=2.52$, $p=.015$, $3.29 \pm 2.7 / 1.70 \pm 1.9$, the pattern for IRI-PT was reversed, $t(52)=-2.35$, $p=.022$, $-0.17 \pm 3.5 / 2.04 \pm 3.4$. Scores in the IRI-FS and IRI-PD did not sign. differ (all p 's $\geq .288$).

We thus conducted a univariate ANOVA for RME including gender as a fixed factor for all participants taking part in the RME (N=262). This showed a sign. main effect of discipline, $F(2,256)=3.37$, $p=.036$, as well as a sign. main effect of gender, $F(1,256)=6.83$, $p=.009$. The interaction was not sign. ($p=.836$).

The questionnaire language did not have a sign. effect on IRI scores, except IRI-FS, with sign. higher scores for the French compared to the English version, $t(126)=2.92$, $p=.004$, 2.56 ± 2.9 vs. 0.97 ± 3.3 (all other p 's $\geq .171$). Further, we found a trend for a sign. effect of language on the RME performance, with higher scores in the French version compared to the English one, $t(126)=1.88$, $p=.062$, 26.39 ± 3.9 vs. 25.13 ± 3.7 .

Discussion



Our results show that psychology students are better than dance students at reading others' emotions through photographs of their eye-region. Psychology students also show a tendency for significantly less personal distress than dancers.

In line with other studies, we found that females show higher emotional concern than males, whereas males show higher perspective taking ability.

Our results thus confirm that the IRI and the RME are sensitive to gender differences and that the RME identifies differences linked to specific artistic/professional practices. However, the RME is highly debated as a useful tool in regards to its picture gender bias and other factors⁹. Moreover, a number of participants in our study indicated difficulty in understanding the emotion terms. Language barriers could thus have been the source of the difference between the French and English scores.

These observations indicate that while dancers might have high sensitivity, these are likely focussed on their bodies. Yet, further comparative studies are needed. Our next step is to investigate differences in the discipline-specific IRI as well as explore effects of training (2nd measurement). Last but not least, more data from actors are needed for better comparison.

References

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